

IN THE CLAIMS:

Please amend the claims as follows:

DI  
Sub  
E

1. (currently amended) A nasopharyngeal catheter for open delivery of a continuous flow of air/oxygen into a patient's distal nasopharynx or oropharynx to supplement a patient's spontaneous respiration in treatment of respiratory failure, respiratory insufficiency, or sleep apnea syndrome, said nasopharyngeal catheter comprising:

a nasal catheter having a proximal end and a distal end adapted to extend through a patient's nose and into the patient's distal nasopharynx or oropharynx without ~~obstructing~~ restricting the patient's spontaneous respiration through the patient's nasopharynx or oropharynx;

a delivery tube adapted to extend below the patient's nostril connected to the proximal end of the nasal catheter; and

a gas source delivering a continuous flow of air/oxygen at a rate of approximately 4 to 40 liters per minute through the delivery tube and nasal catheter into the patient's distal nasopharynx or oropharynx to supplement the patient's respiration through reduced work of breathing, improved alveolar ventilation, or washing out of carbon dioxide from the patient's airway.

2. (original) The nasopharyngeal catheter of claim 1 wherein the nasal catheter comprises a flexible plastic tube that can be cut to a desired length.

3. (original) The nasopharyngeal catheter of claim 2 wherein the nasal catheter further comprises a plurality of markings indicating a series of common lengths for the nasal catheter.

4. (original) The nasopharyngeal catheter of claim 1 wherein the nasal catheter further comprises a radio-opaque stripe.

5. (original) The nasopharyngeal catheter of claim 1 wherein the delivery tube further comprises;

two opposing ends with connectors for removable attachment to the gas source;

and

a cap removably insertable into a connector that is not attached to the gas source.

6. (original) The nasopharyngeal catheter of claim 1 further comprising a connector for removably attaching the proximal end of the nasal catheter to the delivery tube.

7. (original) The nasopharyngeal catheter of claim 1 wherein the nasal catheter further comprises a hydrophilic coating.

8. (currently amended) The nasopharyngeal catheter of claim 1 wherein the nasal catheter has an inside diameter of up to approximately 3 mm.

9. (original) The nasopharyngeal catheter of claim 1 further comprising a humidifier controlling the humidity of the gas delivered through the nasal catheter.

10. (original) The nasopharyngeal catheter of claim 1 further comprising a heater controlling the temperature of the gas delivered through the nasal catheter.

11. (currently amended) The nasopharyngeal catheter of claim 1 wherein gas is supplied through the nasal catheter at a back pressure of up to approximately ~~2 to~~ 25 psi.

12. (original) The nasopharyngeal catheter of claim 1 wherein the gas supplied through the nasal catheter comprises oxygen.

101 13. (original) The nasopharyngeal catheter of claim 1 wherein the gas supplied through the nasal catheter comprises air.

11 14. (original) The nasopharyngeal catheter of claim 1 wherein the gas supplied through the nasal catheter comprises helium.

15. (currently amended) A nasopharyngeal catheter for open delivery of a continuous flow of air/oxygen into a patient's distal nasopharynx or oropharynx to supplement a patient's spontaneous respiration in treatment of respiratory failure, respiratory insufficiency, or sleep apnea syndrome, said nasopharyngeal catheter comprising:

a nasal catheter having a proximal end and a distal end adapted to extend through a patient's nose and into the patient's distal nasopharynx or oropharynx without ~~obstructing~~ restricting the patient's spontaneous respiration through the patient's nasopharynx or oropharynx, said catheter being made of a flexible material that can be trimmed to a desired length;

a delivery tube adapted to extend below the patient's nostril having a connector for removable attachment to the proximal end of the nasal catheter; and

a gas source delivering a continuous flow rate of approximately 4 to 40 liters per minute through the delivery tube and nasal catheter into the patient's distal nasopharynx or oropharynx to supplement the patient's respiration through reduced work of breathing, improved alveolar ventilation, or washing out of carbon dioxide from the patient's airway.

16. (original) The nasopharyngeal catheter of claim 15 wherein the nasal catheter further comprises a plurality of markings indicating a series of common lengths for the nasal catheter.

17. (original) The nasopharyngeal catheter of claim 15 wherein the nasal catheter further comprises a radio-opaque stripe.

18. (original) The nasopharyngeal catheter of claim 15 wherein the delivery tube further comprises;

two opposing ends with connectors for removable attachment to the gas source;  
and

a cap removably insertable into a connector that is not attached to the gas source.

19. (original) The nasopharyngeal catheter of claim 15 wherein the nasal catheter further comprises a hydrophilic coating.

20. (currently amended) The nasopharyngeal catheter of claim 15 wherein the nasal catheter has an inside diameter of up to approximately 3 mm.

21. (original) The nasopharyngeal catheter of claim 15 further comprising a humidifier controlling the humidity of the gas delivered through the nasal catheter.

22. (original) The nasopharyngeal catheter of claim 15 further comprising a heater controlling the temperature of the gas delivered through the nasal catheter.

23. (currently amended) An open delivery method for providing a supplemental continuous flow of air/oxygen to a spontaneously breathing patient in the treatment of respiratory failure, respiratory insufficiency, or sleep apnea syndrome, the method comprising:

advancing a nasopharyngeal catheter through a patient's nostril until the distal tip of the catheter is located in the patient's distal nasopharynx or oropharynx without

**obstructing restricting the patient's spontaneous respiration through the patient's nasopharynx or oropharynx; and**

**supplying air/oxygen through the catheter at a continuous flow rate of approximately 4 to 40 liters per minute into the patient's distal nasopharynx or oropharynx to supplement the patient's respiration through reduced work of breathing, improved alveolar ventilation, or washing out of carbon dioxide from the patient's airway.**

24. (original) The method of claim 23 further comprising the initial steps of:

providing a delivery tube extending beneath the patient's nostril for delivering the flow of air/oxygen, said delivery tube having a connector for attachment to the catheter;

advancing the catheter through a patient's nostril until the distal tip of the catheter is visible through the patient's mouth below the patient's uvula;

cutting the proximal end of the catheter to a desired length so that the distal tip of the catheter will have a desired position relative to the patient's uvula;

attaching the proximal end of the catheter to the connector on the delivery tube.

25. (original) The method of claim 23 further comprising the initial step of selecting the length of the catheter by advancing a catheter through a patient's nostril until the distal tip of the catheter is visible through the patient's mouth below the patient's uvula.

26. (original) The method of claim 23 further comprising controlling the humidity of the air/oxygen supplied through the catheter.

27. (original) The method of claim 23 further comprising regulating the temperature of the air/oxygen supplied through the catheter.

28. (original) The method of claim 23 further comprising supplying helium through the catheter.